

### REMARKS

The examiner's reconsideration of the application is requested in view of the amendment above and comments which follow.

The indicated allowance of claims 67, 68, 73, 76, 79, 81, 82, 93 and 96 is gratefully acknowledged. Those claims are set forth above in final form. The examiner has rejected claim 83 under 35 U.S.C. § 102 on the basis of anticipation. Claim 83 has been cancelled.

Beginning on page 3 of the office action, the examiner has rejected claim 97 under 35 U.S.C. § 103 as being unpatentable over Grodzins U.S. Patent No. 6,151,381 in view of Published U.S. Patent Application No. 2003/0204126. In comments in the office action, the examiner has concluded comments on page 5 of the office action by indicating that rejected claim 97 is directed toward an apparatus, not a method. Accordingly, claim 97 has been cancelled and has been replaced by new method claim 112.

In the system of Grodzins, two Linacs are pulsed alternately to generate X-rays. In contrast, in the method according to claim 112, a Linac is pulsed repeatedly, but only triggered to generate X-rays on each alternate pulse by that Linac.

Signals generated by the detector during read-out cycles for pulses on which the Linac is not triggered are subtracted from signals generated during read-out cycles for pulses on which the Linac is triggered. Significant background noise is generated by the process of pulsing the Linac to generate electrons. X-rays are generated only when these electrons are accelerated and collided with a target by triggering the Linac. By measuring the signals generated for pulses on which the Linac is not triggered the background noise generated by pulsing of the Linac can be

subtracted.

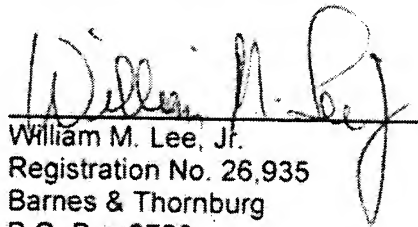
Claim 97 has been re-cast as method claim 112 to emphasize the distinctions from the cited prior art references. It is submitted that no new issues are raised, since claim 97 has been re-cast in method form.

In view of the above, it is submitted that all claims are now in condition for allowance, and the examiner's further and favorable reconsideration of the application is urged.

As this response is being submitted during the fifth month following the examiner's final office action, an appropriate petition for extension of time is also submitted herewith.

March 31, 2008

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "William M. Lee, Jr.", is written over a horizontal line.

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